REMARKS

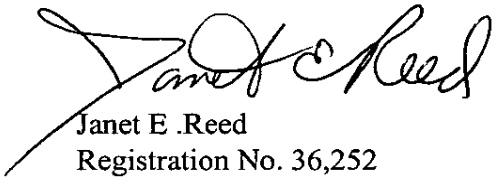
In response to a Notice to Comply with Requirements for Patent Applications Containing Nucleotide Sequence and/or Amino Acid Sequence Disclosures issued March 21, 2002, Applicants submit herewith a paper copy and a computer-readable form of a Sequence Listing of all sequences disclosed in the above-referenced patent application. This preliminary amendment directs entry of the paper copy of the Sequence Listing into the specification.

In addition, amendments to the specification are made at page 8 and 10, to correct discrepancies in numbering of the Sequence ID Numbers.

Attached hereto is a marked-up version of the changes made to the specification and claims by the current amendment. The attached page is captioned **"Version with markings to show changes made."**

It is believed that the application is now in condition for examination on the merits.

Respectfully Submitted,



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Date: 4/23/02

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VERSION WITH MARKINGS TO SHOW CHANGES MADE

The Sequence Listing shown below has been entered after the last page of the specification and before the first page of claims.

SEQUENCE LISTING

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<120> Compositions And Methods For Regulating Apoptosis

<130> PU-0031 (01-1739-1)

<140> 09/965,967
<141> 2001-09-28

<150> 60/236,574
<151> 2000-09-29

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Thr Arg Leu Lys Thr Phe Thr Asp Trp Pro Leu Asp Trp Leu Asp Lys
20 25 30

Arg Gln Leu Ala Gln Thr Gly Met Tyr Phe Thr His Ala Gly Asp Lys
35 40 45

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Val Lys Cys Phe Phe Cys Gly Val Glu Ile Gly Cys Trp Glu Gln Glu
    50                  55                  60

Asp Gln Pro Val Pro Glu His Gln Arg Trp Ser Pro Asn Cys Pro Leu
65                  70                  75                  80

Leu Arg Arg Arg Thr Thr Asn Asn Val Pro Ile Asn Ala Glu Ala Leu
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            20                  25                  30

Gln Leu Ala Arg Ala Gly Phe Tyr Ala Leu Gly Glu Gly Asp Lys Val
        35                  40                  45

Lys Cys Phe His Cys Gly Gly Gly Leu Thr Asp Trp Lys Pro Ser Glu
    50                  55                  60

Asp Pro Trp Glu Gln His Ala Lys Trp Tyr Pro Gly Cys Lys Tyr Leu
65                  70                  75                  80

Leu Glu Gln Lys Gly Gln Glu Tyr Ile Asn Asn Ile His Leu Thr His
                85                  90                  95

Ser Leu Glu Glu Cys Leu Val Arg Thr Thr Glu
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Ala Arg Leu Lys Ser Phe Gln Asn Trp Pro Asp Tyr Ala His Leu Thr
20 25 30

Pro Arg Glu Leu Ala Ser Ala Gly Leu Tyr Tyr Thr Gly Ile Gly Asp
35 40 45

Gln Val Gln Cys Phe Cys Cys Gly Gly Lys Leu Lys Asn Trp Glu Pro
50 55 60

Cys Asp Arg Ala Trp Ser Glu His Arg Arg His Phe Pro Asn Cys Phe
65 70 75 80

A1

Phe Val Leu Gly Arg Asn Leu Asn Ile Arg Ser Glu Ser Asp Ala Val
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Ser Ser Asp Arg Asn Phe Pro Asn Ser Thr Asn Leu Pro Arg
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Phe Asn Arg Leu Lys Thr Phe Ala Asn Phe Pro Ser Gly Ser Pro Val
20 25 30

Ser Ala Ser Thr Leu Ala Arg Ala Gly Phe Leu Tyr Thr Gly Glu Gly
35 40 45

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Asp Thr Val Arg Cys Phe Ser Cys His Ala Ala Val Asp Arg Trp Gln
    50                  55                  60

Tyr Gly Asp Ser Ala Val Gly Arg His Arg Lys Val Ser Pro Asn Cys
65                  70                  75                  80

Arg Phe Ile Asn Gly Phe Tyr Leu Glu Asn Ser Ala Thr Gln Ser Thr
                85                  90                  95

Asn Ser Gly Ile Gln Asn Gly Gln Tyr Lys Val Glu Asn Tyr
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            20                  25                  30

Cys Thr Pro Glu Arg Met Ala Glu Ala Gly Phe Ile His Cys Pro Thr
        35                  40                  45

Glu Asn Glu Pro Asp Leu Ala Gln Cys Phe Phe Cys Phe Lys Glu Leu
    50                  55                  60

Glu Gly Trp Glu Pro Asp Asp Asp Pro Ile Glu Glu His Lys Lys His
65                  70                  75                  80

Ser Ser Gly Cys Ala Phe Leu Ser Val Lys Lys Gln Phe Glu Glu Leu
                85                  90                  95

Thr Leu
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Met Ala Ile Ala Tyr Phe Ile Pro Asp Gln Ala
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<213> Drosophila melanogaster

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Ala Ser Gly Asn Tyr Phe Pro Gln Tyr Pro Glu Tyr Ala Ile Glu Thr
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Ala Arg Leu Arg Thr Phe Glu Ala Trp Pro Arg Asn Leu Lys Gln Lys
20 25 30

Pro His Gln Leu Ala Glu Ala Gly Phe Phe Tyr Thr Gly Val Gly Asp
35 40 45

Arg Val Arg Cys Phe Ser Cys Gly Gly Gly Leu Met Asp Trp Asn Asp
50 55 60

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Asn Asp Glu Pro Trp Glu Gln His Ala Leu Trp Leu Ser Gln Cys Arg
65                  70                  75                  80

Phe Val Lys Leu Met Lys Gly Gln Leu Tyr Ile Asp Thr Val Ala Ala
                85                  90                  95

Lys Pro Val Leu Ala Glu Glu Lys Glu Glu Ser Thr Ser
            100                 105
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The paragraph at page 8, lines 20-30 has been replaced with the following amended paragraph:

--**Fig. 6.** Schematic diagram showing sequence alignment of the N-terminal peptides from Hid (SEQ ID NO:15), Grim (SEQ ID NO:16), Reaper (SEQ ID NO:17) and Smac (SEQ ID NO:18) (**Fig. 6a**) and of the BIR domains from DIAP1-BIR2 (SEQ ID NO: 30 [18]), DIAP-BIR1 (SEQ ID NO:19), XIAP-BIR3 (SEQ ID NO:20), XIAP-BIR2 (SEQ ID NO:21), XIAP-BIR1 (SEQ ID NO:22), and survivin (SEQ ID NO:23) (**Fig. 6b**). The zinc-chelating residues are shown in red whereas the conserved amino acids are highlighted in yellow. Red and yellow arrows identify those residues that make intermolecular hydrogen bonds using their side chain and main chain atoms, respectively. The solvent accessibility for the peptides (Fig. 10a) and the secondary structural elements for the DIAP1-BIR2 domain (Fig. 10b) are indicated below the sequence alignment.--

The paragraph at page 10, lines 12-19 has been replaced with the following amended paragraph.

--**Fig. 13.** Effect of *Drosophila* pentapeptides, Hid-5, Reaper-5, and Grim-5 on XIAP inhibition on caspase-3 activation. **Fig. 13a,** The amino acid sequences of Smac-5 (SEQ ID NO:24 [25]) and the NH_2-terminal sequence of Hid (SEQ ID NO:26), Reaper (SEQ ID NO:27) and Grim (SEQ ID NO:28) are shown. The conserved pentapeptide sequences are boxed. **Fig. 13b,** 10-1000 μM of pentapeptides as indicated were assayed in a reaction containing recombinant human Apaf-1 and procaspase-9, XIAP, purified cytochrome c, and in vitro translated ^{35}S-labeled procaspase-3. The procaspase-3 cleavage activity was measured by phosphorimaging.--